Mohan Edirisinghe

List of Publications by Year in descending order

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Version: 2024-02-01

174 papers 6,628 citations

76031 42 h-index 97045 71 g-index

186 all docs

186 docs citations

186 times ranked 8401 citing authors

| # | Article | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Electrospinning versus fibre production methods: from specifics to technological convergence. Chemical Society Reviews, 2012, 41, 4708. | 18.7 | 548 |
| 2 | A novel method of selecting solvents for polymer electrospinning. Polymer, 2010, 51, 1654-1662. | 1.8 | 269 |
| 3 | Novel microbubble preparation technologies. Soft Matter, 2008, 4, 2350. | 1.2 | 219 |
| 4 | Mapping the Influence of Solubility and Dielectric Constant on Electrospinning Polycaprolactone Solutions. Macromolecules, 2012, 45, 4669-4680. | 2.2 | 211 |
| 5 | Forming of Polymer Nanofibers by a Pressurised Gyration Process. Macromolecular Rapid Communications, 2013, 34, 1134-1139. | 2.0 | 188 |
| 6 | Drug Delivery Strategies for Platinum-Based Chemotherapy. ACS Nano, 2017, 11, 8560-8578. | 7.3 | 172 |
| 7 | Bacterial cellulose micro-nano fibres for wound healing applications. Biotechnology Advances, 2020, 41, 107549. | 6.0 | 144 |
| 8 | Developments in Pressurized Gyration for the Mass Production of Polymeric Fibers. Macromolecular Materials and Engineering, 2018, 303, 1800218. | 1.7 | 111 |
| 9 | Generation of multilayered structures for biomedical applications using a novel tri-needle coaxial device and electrohydrodynamic flow. Journal of the Royal Society Interface, 2008, 5, 1255-1261. | 1.5 | 109 |
| 10 | A New Method for the Preparation of Monoporous Hollow Microspheres. Langmuir, 2010, 26, 5115-5121. | 1.6 | 108 |
| 11 | One-step electrohydrodynamic production of drug-loaded micro- and nanoparticles. Journal of the Royal Society Interface, 2010, 7, 667-675. | 1.5 | 96 |
| 12 | Experimental and theoretical investigation of the fluid behavior during polymeric fiber formation with and without pressure. Applied Physics Reviews, 2019, 6, 041401. | 5.5 | 94 |
| 13 | Facile synthesis of both needle-like and spherical hydroxyapatite nanoparticles: Effect of synthetic temperature and calcination on morphology, crystallite size and crystallinity. Materials Science and Engineering C, 2014, 42, 83-90. | 3.8 | 85 |
| 14 | A comparison of methods to assess the antimicrobial activity of nanoparticle combinations on bacterial cells. PLoS ONE, 2018, 13, e0192093. | 1.1 | 74 |
| 15 | Electrohydrodynamic Direct Writing of Biomedical Polymers and Composites. Macromolecular Materials and Engineering, 2010, 295, 315-319. | 1.7 | 71 |
| 16 | PEEK surface modification by fast ambient-temperature sulfonation for bone implant applications. Journal of the Royal Society Interface, 2019, 16, 20180955. | 1.5 | 71 |
| 17 | Preparation of Multilayered Polymeric Structures Using a Novel Fourâ€Needle Coaxial Electrohydrodynamic Device. Macromolecular Rapid Communications, 2014, 35, 618-623. | 2.0 | 70 |
| 18 | Electrosprayed nanoparticle delivery system for controlled release. Materials Science and Engineering C, 2016, 66, 138-146. | 3.8 | 70 |

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|----|--|--------------|-----------|
| 19 | Dynamics of Bubble Formation in Highly Viscous Liquids. Langmuir, 2008, 24, 4388-4393. | 1.6 | 69 |
| 20 | Microstructure and antibacterial efficacy of graphene oxide nanocomposite fibres. Journal of Colloid and Interface Science, 2020, 571, 239-252. | 5.0 | 67 |
| 21 | Formation of Protein and Protein–Gold Nanoparticle Stabilized Microbubbles by Pressurized Gyration. Langmuir, 2015, 31, 659-666. | 1.6 | 65 |
| 22 | Highly Stretchable and Highly Resilient Polymer–Clay Nanocomposite Hydrogels with Low Hysteresis. ACS Applied Materials & amp; Interfaces, 2017, 9, 22223-22234. | 4.0 | 65 |
| 23 | Evaluation of burst release and sustained release of pioglitazone-loaded fibrous mats on diabetic wound healing: an <i>in vitro</i> and <i>in vivo</i> comparison study. Journal of the Royal Society Interface, 2020, 17, 20190712. | 1.5 | 65 |
| 24 | Electrohydrodynamic encapsulation of cisplatin in poly (lactic-co-glycolic acid) nanoparticles for controlled drug delivery. Nanomedicine: Nanotechnology, Biology, and Medicine, 2016, 12, 1919-1929. | 1.7 | 64 |
| 25 | Nanocomposites: suitable alternatives as antimicrobial agents. Nanotechnology, 2018, 29, 282001. | 1.3 | 63 |
| 26 | Polymer–Magnetic Composite Fibers for Remote-Controlled Drug Release. ACS Applied Materials & Interfaces, 2018, 10, 15524-15531. | 4.0 | 61 |
| 27 | Controlling the thickness of hollow polymeric microspheres prepared by electrohydrodynamic atomization. Journal of the Royal Society Interface, 2010, 7, S451-60. | 1.5 | 60 |
| 28 | Investigating the particle to fibre transition threshold during electrohydrodynamic atomization of a polymer solution. Materials Science and Engineering C, 2016, 65, 240-250. | 3.8 | 60 |
| 29 | Wholly Biobased, Highly Stretchable, Hydrophobic, and Self-healing Thermoplastic Elastomer. ACS Applied Materials & Samp; Interfaces, 2021, 13, 6720-6730. | 4.0 | 60 |
| 30 | Design, construction and performance of a portable handheld electrohydrodynamic multi-needle spray gun for biomedical applications. Materials Science and Engineering C, 2013, 33, 213-223. | 3.8 | 59 |
| 31 | Solubility–spinnability map and model for the preparation of fibres of polyethylene (terephthalate) using gyration and pressure. Chemical Engineering Journal, 2015, 280, 344-353. | 6.6 | 57 |
| 32 | Current methodologies and approaches for the formation of core–sheath polymer fibers for biomedical applications. Applied Physics Reviews, 2020, 7, . | 5 . 5 | 56 |
| 33 | Accelerated diabetic wound healing by topical application of combination oral antidiabetic agents-loaded nanofibrous scaffolds: An in vitro and in vivo evaluation study. Materials Science and Engineering C, 2021, 119, 111586. | 3.8 | 54 |
| 34 | Release profile and characteristics of electrosprayed particles for oral delivery of a practically insoluble drug. Journal of the Royal Society Interface, 2012, 9, 2437-2449. | 1.5 | 52 |
| 35 | Mucoadhesion of Progesterone-Loaded Drug Delivery Nanofiber Constructs. ACS Applied Materials & Samp; Interfaces, 2018, 10, 13381-13389. | 4.0 | 51 |
| 36 | Coupling Infusion and Gyration for the Nanoscale Assembly of Functional Polymer Nanofibers Integrated with Genetically Engineered Proteins. Macromolecular Rapid Communications, 2015, 36, 1322-1328. | 2.0 | 50 |

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| 37 | Poly(3-hydroxyoctanoate), a promising new material for cardiac tissue engineering. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, e495-e512. | 1.3 | 50 |
| 38 | The effect of graphene–poly(methyl methacrylate) fibres on microbial growth. Interface Focus, 2018, 8, 20170058. | 1.5 | 50 |
| 39 | Preparation of monodisperse microbubbles using an integrated embedded capillary T-junction with electrohydrodynamic focusing. Lab on A Chip, 2014, 14, 2437-2446. | 3.1 | 49 |
| 40 | The effect of surfactant type and concentration on the size and stability of microbubbles produced in a capillary embedded T-junction device. RSC Advances, 2015, 5, 10751-10762. | 1.7 | 49 |
| 41 | Electrospraying and Electrospinning of Chocolate Suspensions. Food and Bioprocess Technology, 2012, 5, 2285-2300. | 2.6 | 48 |
| 42 | Continuous Generation of Ethyl Cellulose Drug Delivery Nanocarriers from Microbubbles. Pharmaceutical Research, 2013, 30, 225-237. | 1.7 | 43 |
| 43 | Preparation of bone-implants by coating hydroxyapatite nanoparticles on self-formed titanium dioxide thin-layers on titanium metal surfaces. Materials Science and Engineering C, 2016, 63, 172-184. | 3.8 | 43 |
| 44 | Composite nanoclay-hydroxyapatite-polymer fiber scaffolds for bone tissue engineering manufactured using pressurized gyration. Composites Science and Technology, 2021, 202, 108598. | 3.8 | 43 |
| 45 | Generation of poly(N-vinylpyrrolidone) nanofibres using pressurised gyration. Materials Science and Engineering C, 2014, 39, 168-176. | 3.8 | 42 |
| 46 | Antibacterial Activity and Biosensing of PVA-Lysozyme Microbubbles Formed by Pressurized Gyration. Langmuir, 2015, 31, 9771-9780. | 1.6 | 42 |
| 47 | Making Nonwoven Fibrous Poly(εâ€caprolactone) Constructs for Antimicrobial and Tissue Engineering Applications by Pressurized Melt Gyration. Macromolecular Materials and Engineering, 2016, 301, 922-934. | 1.7 | 42 |
| 48 | Ethyl cellulose, cellulose acetate and carboxymethyl cellulose microstructures prepared using electrohydrodynamics and green solvents. Cellulose, 2018, 25, 1687-1703. | 2.4 | 42 |
| 49 | Core-Liquid-Induced Transition from Coaxial Electrospray to Electrospinning of Low-Viscosity Poly(lactide- <i>co</i> glycolide) Sheath Solution. Macromolecules, 2014, 47, 7930-7938. | 2.2 | 40 |
| 50 | Novel Making of Bacterial Cellulose Blended Polymeric Fiber Bandages. Macromolecular Materials and Engineering, 2018, 303, 1700607. | 1.7 | 40 |
| 51 | Simultaneous Application of Pressure-Infusion-Gyration to Generate Polymeric Nanofibers. Macromolecular Materials and Engineering, 2017, 302, 1600564. | 1.7 | 39 |
| 52 | Electrohydrodynamic fabrication of core–shell PLGA nanoparticles with controlled release of cisplatin for enhanced cancer treatment. International Journal of Nanomedicine, 2017, Volume 12, 3913-3926. | 3.3 | 39 |
| 53 | Generation of Core–Sheath Polymer Nanofibers by Pressurised Gyration. Polymers, 2020, 12, 1709. | 2.0 | 39 |
| 54 | Direct Writing of Polycaprolactone Polymer for Potential Biomedical Engineering Applications. Advanced Engineering Materials, 2011, 13, B296. | 1.6 | 38 |

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| 55 | Making nanofibres of mucoadhesive polymer blends for vaginal therapies. European Polymer Journal, 2015, 70, 186-196. | 2.6 | 38 |
| 56 | The development of progesterone-loaded nanofibers using pressurized gyration: A novel approach to vaginal delivery for the prevention of pre-term birth. International Journal of Pharmaceutics, 2018, 540, 31-39. | 2.6 | 38 |
| 57 | Comparative Study of the Antimicrobial Effects of Tungsten Nanoparticles and Tungsten Nanocomposite Fibres on Hospital Acquired Bacterial and Viral Pathogens. Nanomaterials, 2020, 10, 1017. | 1.9 | 38 |
| 58 | Application of Electrohydrodynamic Technology for Folic Acid Encapsulation. Food and Bioprocess Technology, 2013, 6, 1837-1846. | 2.6 | 37 |
| 59 | Physio-chemical and antibacterial characteristics of pressure spun nylon nanofibres embedded with functional silver nanoparticles. Materials Science and Engineering C, 2015, 56, 195-204. | 3.8 | 36 |
| 60 | Engineering a material for biomedical applications with electric field assisted processing. Applied Physics A: Materials Science and Processing, 2009, 97, 31-37. | 1.1 | 35 |
| 61 | Development and Characterization of Amorphous Nanofiber Drug Dispersions Prepared Using Pressurized Gyration. Molecular Pharmaceutics, 2015, 12, 3851-3861. | 2.3 | 35 |
| 62 | The comparision of glybenclamide and metformin-loaded bacterial cellulose/gelatin nanofibres produced by a portable electrohydrodynamic gun for diabetic wound healing. European Polymer Journal, 2020, 134, 109844. | 2.6 | 35 |
| 63 | Fabrication of Biomaterials via Controlled Protein Bubble Generation and Manipulation. Biomacromolecules, 2011, 12, 4291-4300. | 2.6 | 34 |
| 64 | Effect of operating conditions and liquid physical properties on the size of monodisperse microbubbles produced in a capillary embedded T-junction device. Microfluidics and Nanofluidics, 2013, 14, 797-808. | 1.0 | 34 |
| 65 | Preparation of polymeric nanoparticles by novel electrospray nanoprecipitation. Polymer International, 2015, 64, 183-187. | 1.6 | 34 |
| 66 | Antimicrobial activity of telluriumâ€loaded polymeric fiber meshes. Journal of Applied Polymer Science, 2018, 135, 46368. | 1.3 | 34 |
| 67 | A novel process for drug encapsulation using a liquid to vapour phase change material. Soft Matter, 2009, 5, 5029. | 1.2 | 33 |
| 68 | Beads, beaded-fibres and fibres: Tailoring the morphology of poly(caprolactone) using pressurised gyration. Materials Science and Engineering C, 2016, 69, 1373-1382. | 3.8 | 33 |
| 69 | Novel pressurised gyration device for making core-sheath polymer fibres. Materials and Design, 2019, 178, 107846. | 3.3 | 33 |
| 70 | Preparation of Polymeric and Ceramic Porous Capsules by a Novel Electrohydrodynamic Process. Pharmaceutical Development and Technology, 2008, 13, 425-432. | 1.1 | 32 |
| 71 | A Comparison of Electricâ€Fieldâ€Driven and Pressureâ€Driven Fiber Generation Methods for Drug Delivery. Macromolecular Materials and Engineering, 2018, 303, 1700577. | 1.7 | 32 |
| 72 | A novel reusable anti-COVID-19 transparent face respirator with optimized airflow. Bio-Design and Manufacturing, 2021, 4, 1-9. | 3.9 | 32 |

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| 73 | A novel treatment strategy for preterm birth: Intra-vaginal progesterone-loaded fibrous patches. International Journal of Pharmaceutics, 2020, 588, 119782. | 2.6 | 31 |
| 74 | Surface interactions and viability of coronaviruses. Journal of the Royal Society Interface, 2021, 18, 20200798. | 1.5 | 31 |
| 75 | Preparation of poly(glycerol sebacate) fibers for tissue engineering applications. European Polymer Journal, 2019, 121, 109297. | 2.6 | 30 |
| 76 | Antiâ€fungal bandages containing cinnamon extract. International Wound Journal, 2019, 16, 730-736. | 1.3 | 30 |
| 77 | Coâ€Culture of Keratinocyteâ€ <i>Staphylococcus aureus</i> on Cuâ€Agâ€Zn/CuO and Cuâ€Agâ€W Nanoparticle Loaded Bacterial Cellulose:PMMA Bandages. Macromolecular Materials and Engineering, 2019, 304, 1800537. | 1.7 | 30 |
| 78 | Gyrospun antimicrobial nanoparticle loaded fibrous polymeric filters. Materials Science and Engineering C, 2017, 74, 315-324. | 3.8 | 29 |
| 79 | Metformin-Loaded Polymer-Based Microbubbles/Nanoparticles Generated for the Treatment of Type 2 Diabetes Mellitus. Langmuir, 2022, 38, 5040-5051. | 1.6 | 29 |
| 80 | Graphene nanoplatelets loaded polyurethane and phenolic resin fibres by combination of pressure and gyration. Composites Science and Technology, 2016, 129, 173-182. | 3.8 | 28 |
| 81 | Novel Preparation, Microstructure, and Properties of Polyacrylonitrile-Based Carbon Nanofiber–Graphene Nanoplatelet Materials. ACS Omega, 2016, 1, 202-211. | 1.6 | 28 |
| 82 | Viral filtration using carbonâ€based materials. Medical Devices & Sensors, 2020, 3, e10107. | 2.7 | 27 |
| 83 | Harnessing Polyhydroxyalkanoates and Pressurized Gyration for Hard and Soft Tissue Engineering. ACS Applied Materials & Diterfaces, 2021, 13, 32624-32639. | 4.0 | 27 |
| 84 | Core/shell microencapsulation of indomethacin/paracetamol by co-axial electrohydrodynamic atomization. Materials and Design, 2017, 136, 204-213. | 3.3 | 26 |
| 85 | Fiber Forming Capability of Binary and Ternary Compositions in the Polymer System: Bacterial Cellulose–Polycaprolactone–Polylactic Acid. Polymers, 2019, 11, 1148. | 2.0 | 26 |
| 86 | Facile one-pot formation of ceramic fibres from preceramic polymers by pressurised gyration. Ceramics International, 2015, 41, 6067-6073. | 2.3 | 24 |
| 87 | Cellular interactions with bacterial cellulose: Polycaprolactone nanofibrous scaffolds produced by a portable electrohydrodynamic gun for pointâ€ofâ€need wound dressing. International Wound Journal, 2018, 15, 789-797. | 1.3 | 24 |
| 88 | Effect of copolymer composition on particle morphology and release behavior in vitro using progesterone. Materials and Design, 2018, 159, 57-67. | 3.3 | 23 |
| 89 | Electrospinning short polymer micro-fibres with average aspect ratios in the range of 10–200. Journal of Polymer Research, 2011, 18, 2515-2522. | 1.2 | 22 |
| 90 | A portable device for in situ deposition of bioproducts. Bioinspired, Biomimetic and Nanobiomaterials, 2014, 3, 94-105. | 0.7 | 22 |

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| 91 | Electrospinning Optimization of Eudragit E PO with and without Chlorpheniramine Maleate Using a Design of Experiment Approach. Molecular Pharmaceutics, 2019, 16, 2557-2568. | 2.3 | 22 |
| 92 | Calcium Alginate Foams Prepared by a Microfluidic T-Junction System: Stability and Food Applications. Food and Bioprocess Technology, 2012, 5, 2848-2857. | 2.6 | 21 |
| 93 | Porous Polymeric Films from Microbubbles Generated Using a T-Junction Microfluidic Device. Langmuir, 2016, 32, 13377-13385. | 1.6 | 21 |
| 94 | Metal-based nanoparticles for combating antibiotic resistance. Applied Physics Reviews, 2021, 8, . | 5.5 | 21 |
| 95 | New Generation of Tunable Bioactive Shape Memory Mats Integrated with Genetically Engineered Proteins. Macromolecular Bioscience, 2017, 17, 1600270. | 2.1 | 20 |
| 96 | Electrosprayed microparticles for intestinal delivery of prednisolone. Journal of the Royal Society Interface, 2018, 15, 20180491. | 1.5 | 20 |
| 97 | Core–sheath polymer nanofiber formation by the simultaneous application of rotation and pressure in a novel purpose-designed vessel. Applied Physics Reviews, 2021, 8, . | 5.5 | 20 |
| 98 | Microfluidic preparation of polymer nanospheres. Journal of Nanoparticle Research, 2014, 16, 2626. | 0.8 | 19 |
| 99 | Evolution of Surface Nanopores in Pressurised Gyrospun Polymeric Microfibers. Polymers, 2017, 9, 508. | 2.0 | 19 |
| 100 | Latest developments in innovative manufacturing to combine nanotechnology with healthcare. Nanomedicine, 2018, 13, 5-8. | 1.7 | 19 |
| 101 | Bioinspired preparation of alginate nanoparticles using microbubble bursting. Materials Science and Engineering C, 2015, 46, 132-139. | 3.8 | 18 |
| 102 | An Inexpensive, Portable Device for Pointâ€ofâ€Need Generation of Silverâ€Nanoparticle Doped Cellulose Acetate Nanofibers for Advanced Wound Dressing. Macromolecular Materials and Engineering, 2018, 303, 1700586. | 1.7 | 18 |
| 103 | Honeycomb-like PLGA- <i>b</i> -PEG Structure Creation with T-Junction Microdroplets. Langmuir, 2018, 34, 7989-7997. | 1.6 | 18 |
| 104 | Boron nitride nanoscrolls: Structure, synthesis, and applications. Applied Physics Reviews, 2019, 6, . | 5.5 | 18 |
| 105 | General Computational Methodology for Modeling Electrohydrodynamic Flows: Prediction and Optimization Capability for the Generation of Bubbles and Fibers. Langmuir, 2019, 35, 10203-10212. | 1.6 | 18 |
| 106 | Coâ€Axial Gyroâ€Spinning of PCL/PVA/HA Coreâ€Sheath Fibrous Scaffolds for Bone Tissue Engineering. Macromolecular Bioscience, 2021, 21, e2100177. | 2.1 | 18 |
| 107 | Novel preparation of controlled porosity particle/fibre loaded scaffolds using a hybrid micro-fluidic and electrohydrodynamic technique. Biofabrication, 2014, 6, 045010. | 3.7 | 17 |
| 108 | Microstructure and mechanical properties of synthetic brow-suspension materials. Materials Science and Engineering C, 2014, 35, 220-230. | 3.8 | 17 |

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| 109 | Analysis of blink dynamics in patients with blepharoptosis. Journal of the Royal Society Interface, 2016, 13, 20150932. | 1.5 | 17 |
| 110 | Combining microfluidic devices with coarse capillaries to reduce the size of monodisperse microbubbles. RSC Advances, 2016, 6, 63568-63577. | 1.7 | 17 |
| 111 | Electrosprayed microparticles: a novel drug delivery method. Expert Opinion on Drug Delivery, 2019, 16, 895-901. | 2.4 | 16 |
| 112 | Severe Acute Respiratory Syndrome Type 2â€Causing Coronavirus: Variants and Preventive Strategies. Advanced Science, 2022, 9, e2104495. | 5.6 | 16 |
| 113 | An encapsulated drug delivery system for recalcitrant urinary tract infection. Journal of the Royal Society Interface, 2013, 10, 20130747. | 1.5 | 15 |
| 114 | The generation of compartmentalized nanoparticles containing siRNA and cisplatin using a multi-needle electrohydrodynamic strategy. Nanoscale, 2017, 9, 5975-5985. | 2.8 | 15 |
| 115 | Effectiveness of Oil-Layered Albumin Microbubbles Produced Using Microfluidic T-Junctions in Series for In Vitro Inhibition of Tumor Cells. Langmuir, 2020, 36, 11429-11441. | 1.6 | 15 |
| 116 | Utilization of microfluidic V-junction device to prepare surface itraconazole adsorbed nanospheres. International Journal of Pharmaceutics, 2014, 472, 339-346. | 2.6 | 14 |
| 117 | Tailoring the surface of polymeric nanofibres generated by pressurised gyration. Surface Innovations, 2016, 4, 167-178. | 1.4 | 14 |
| 118 | Process Modeling for the Fiber Diameter of Polymer, Spun by Pressure-Coupled Infusion Gyration. ACS Omega, 2018, 3, 5470-5479. | 1.6 | 14 |
| 119 | Fiber Formation from Silk Fibroin Using Pressurized Gyration. Macromolecular Materials and Engineering, 2019, 304, 1800577. | 1.7 | 14 |
| 120 | <p>Copolymer Composition and Nanoparticle Configuration Enhance in vitro Drug Release Behavior of Poorly Water-soluble Progesterone for Oral Formulations</p> . International Journal of Nanomedicine, 2020, Volume 15, 5389-5403. | 3.3 | 14 |
| 121 | Enhanced efficacy in drug-resistant cancer cells through synergistic nanoparticle mediated delivery of cisplatin and decitabine. Nanoscale Advances, 2020, 2, 1177-1186. | 2.2 | 14 |
| 122 | Vitamin D3/vitamin K2/magnesium-loaded polylactic acid/tricalcium phosphate/polycaprolactone composite nanofibers demonstrated osteoinductive effect by increasing Runx2 via Wnt/β-catenin pathway. International Journal of Biological Macromolecules, 2021, 190, 244-258. | 3.6 | 14 |
| 123 | Bioinspired bubble design for particle generation. Journal of the Royal Society Interface, 2012, 9, 389-395. | 1.5 | 13 |
| 124 | Creating "hotels―for cells by electrospinning honeycomb-like polymeric structures. Materials Science and Engineering C, 2013, 33, 4384-4391. | 3.8 | 13 |
| 125 | Characterisation of the Chemical Composition and Structural Features of Novel Antimicrobial Nanoparticles. Nanomaterials, 2017, 7, 152. | 1.9 | 13 |
| 126 | Rapid and label-free detection of COVID-19 using coherent anti-Stokes Raman scattering microscopy. MRS Communications, 2020, 10, 566-572. | 0.8 | 13 |

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|-----|---|-----|--------------|
| 127 | The effect of solvent and pressure on polycaprolactone solutions for particle and fibre formation. European Polymer Journal, 2022, 173, 111300. | 2.6 | 13 |
| 128 | Forming of Protein Bubbles and Porous Films Using Coâ€Axial Electrohydrodynamic Flow Processing. Macromolecular Materials and Engineering, 2011, 296, 8-13. | 1.7 | 12 |
| 129 | Novel Preparation of Monodisperse Microbubbles by Integrating Oscillating Electric Fields with Microfluidics. Micromachines, 2018, 9, 497. | 1.4 | 12 |
| 130 | Novel antibiotic-loaded particles conferring eradication of deep tissue bacterial reservoirs for the treatment of chronic urinary tract infection. Journal of Controlled Release, 2020, 328, 490-502. | 4.8 | 12 |
| 131 | Effect of humidity on the generation and control of the morphology of honeycomb-like polymeric structures by electrospinning. European Polymer Journal, 2014, 61, 72-82. | 2.6 | 11 |
| 132 | Novel encapsulation systems and processes for overcoming the challenges of polypharmacy. Current Opinion in Pharmacology, 2014, 18, 28-34. | 1.7 | 11 |
| 133 | Evolution of self-generating porous microstructures in polyacrylonitrile-cellulose acetate blend fibres. Materials and Design, 2017, 134, 259-271. | 3.3 | 11 |
| 134 | Alginate foam-based three-dimensional culture to investigate drug sensitivity in primary leukaemia cells. Journal of the Royal Society Interface, 2018, 15, 20170928. | 1.5 | 11 |
| 135 | The Design and Construction of an Electrohydrodynamic Cartesian Robot for the Preparation of Tissue Engineering Constructs. PLoS ONE, 2014, 9, e112166. | 1.1 | 11 |
| 136 | Utilising Co-Axial Electrospinning as a Taste-Masking Technology for Paediatric Drug Delivery. Pharmaceutics, 2021, 13, 1665. | 2.0 | 11 |
| 137 | Facile One-Pot Method for All Aqueous Green Formation of Biocompatible Silk Fibroin-Poly(Ethylene) Tj ETQq1 1290-1300. | | rgBT /Overlo |
| 138 | A device for the fabrication of multifunctional particles from microbubble suspensions. Materials Science and Engineering C, 2012, 32, 1005-1010. | 3.8 | 10 |
| 139 | Self-assembled micro-stripe patterning of sessile polymeric nanofluid droplets. Journal of Colloid and Interface Science, 2020, 561, 470-480. | 5.0 | 10 |
| 140 | Nextâ€generation Antimicrobial Peptides (AMPs) incorporated nanofibre wound dressings. Medical Devices & Sensors, 2021, 4, e10144. | 2.7 | 10 |
| 141 | Perspective: Covid-19; emerging strategies and material technologies. Emergent Materials, 2021, 4, 3-8. | 3.2 | 10 |
| 142 | Porous Graphene Composite Polymer Fibres. Polymers, 2021, 13, 76. | 2.0 | 10 |
| 143 | A novel hybrid system for the fabrication of a fibrous mesh with micro-inclusions. Carbohydrate Polymers, 2012, 89, 222-229. | 5.1 | 9 |
| 144 | Effect of the Mixing Region Geometry and Collector Distance on Microbubble Formation in a Microfluidic Device Coupled with ac–dc Electric Fields. Langmuir, 2019, 35, 10052-10060. | 1.6 | 9 |

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| 145 | Nozzleâ€Pressurized Gyration: A Novel Fiber Manufacturing Process. Macromolecular Materials and Engineering, 2022, 307, . | 1.7 | 9 |
| 146 | Manufacturing Man-Made Magnetosomes: High-Throughput In Situ Synthesis of Biomimetic Magnetite Loaded Nanovesicles. Macromolecular Bioscience, 2016, 16, 1555-1561. | 2.1 | 8 |
| 147 | Enhancing In Vitro Stability of Albumin Microbubbles Produced Using Microfluidic T-Junction Device. Langmuir, 2021, , . | 1.6 | 8 |
| 148 | Changing the Size and Surface Roughness of Polymer Nanospheres Formed Using a Microfluidic Technique. Jom, 2015, 67, 811-817. | 0.9 | 7 |
| 149 | Biofabrication of Gelatin Tissue Scaffolds with Uniform Pore Size via Microbubble Assembly. Macromolecular Materials and Engineering, 2019, 304, 1900394. | 1.7 | 7 |
| 150 | COVID‶9: Facemasks, healthcare policies and risk factors in the crucial initial months of a global pandemic. Medical Devices & Sensors, 2020, 3, e10120. | 2.7 | 7 |
| 151 | Binary polymer systems for biomedical applications. International Materials Reviews, 2023, 68, 184-224. | 9.4 | 7 |
| 152 | Optimised release of tetracycline hydrochloride from core-sheath fibres produced by pressurised gyration. Journal of Drug Delivery Science and Technology, 2022, 72, 103359. | 1.4 | 7 |
| 153 | Controlled preparation of drug-exchange phase loaded polymeric fibres. Bioinspired, Biomimetic and Nanobiomaterials, 2012, 1, 48-56. | 0.7 | 6 |
| 154 | Electrohydrodynamic printing of silk fibroin. Macromolecular Research, 2013, 21, 339-342. | 1.0 | 6 |
| 155 | Novel electrically driven direct-writing methods with managed control on in-situ shape and encapsulation polymer forming. International Journal of Material Forming, 2013, 6, 281-288. | 0.9 | 6 |
| 156 | Development of artificial bone marrow fibre scaffolds to study resistance to antiâ€leukaemia agents. British Journal of Haematology, 2018, 182, 924-927. | 1.2 | 6 |
| 157 | Generating Antibacterial Microporous Structures Using Microfluidic Processing. ACS Omega, 2019, 4, 2225-2233. | 1.6 | 6 |
| 158 | Empirical modelling and optimization of pressure-coupled infusion gyration parameters for the nanofibre fabrication. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2019, 475, 20190008. | 1.0 | 6 |
| 159 | Microstructure of fibres pressure-spun from polyacrylonitrile–graphene oxide composite mixtures. Composites Science and Technology, 2020, 197, 108214. | 3.8 | 6 |
| 160 | Exploiting the antiviral potential of intermetallic nanoparticles. Emergent Materials, 2022, 5, 1251-1260. | 3.2 | 6 |
| 161 | The effect of needle tip displacement in co-axial electrohydrodynamic processing. RSC Advances, 2016, 6, 75258-75268. | 1.7 | 5 |
| 162 | The biomedical applications of graphene. Interface Focus, 2018, 8, 20180006. | 1.5 | 5 |

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| 163 | A Portable Device for the Generation of Drug-Loaded Three-Compartmental Fibers Containing Metronidazole and Iodine for Topical Application. Pharmaceutics, 2020, 12, 373. | 2.0 | 5 |
| 164 | Preface to the Microbubbles: Exploring Gas-Liquid Interfaces for Biomedical Applications Special Issue. Langmuir, 2019, 35, 9995-9996. | 1.6 | 4 |
| 165 | The influence of drug solubility and sampling frequency on metformin and glibenclamide release from double-layered particles: experimental analysis and mathematical modelling. Journal of the Royal Society Interface, 2019, 16, 20190237. | 1.5 | 4 |
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